

# STANDARDS FOR LIQUID PROPANE GAS OUTDOOR HEATERS

*For Use by Unidocs Member Agencies or where approved by your Local Jurisdiction*

*Authority Cited: California Fire Code (CFC); Uniform Fire Code (UFC)*

Liquid propane gas (LPG) heaters may be conditionally permitted in outdoor locations at permanent facilities frequented by the public provided that the use complies with requirements described in this document.

## A. Definitions

**Confined/Enclosed Dining Area** - An area that is surrounded or bordered by fencing, landscaping, walls, etc. that would impair or prevent free and clear access to a public way.

**Group A (Assembly) Occupancy** - A confined or enclosed outdoor dining area with an occupant load of 50 or more. [CFC §216]

**Permanent Facility** - Any public or private establishment at a fixed location, such as a restaurant. This does not include special events using LPG on a temporary basis.

**Special Event** - A carnival, fair, festival, etc.

## B. Fees and Permits

1. A permit must be obtained from the local Fire Department. [CFC §105]
2. Contact your local Fire Department's Fire Prevention Division regarding fee amounts.

## C. Requirements

1. Only listed and approved LPG appliances and containers (DOT or ASME) shall be used. Each appliance shall be installed and maintained per the manufacturer's instructions. [CFC §8205.1]
2. LPG is prohibited in Group A occupancies. Natural gas fixed piping systems may be permitted with the approval of the Building Official. [CFC §2501.17 & 8001.15.2.2.4]
3. LPG containers are prohibited inside tents, canopies, and temporary membrane structures. [CFC §3216.4.2]
4. LPG containers shall not be located less than 5 feet from any building or public way; or beneath combustible overhangs, awnings, sunshades, decorations, etc. [CFC Table 8204-A]
5. LPG containers shall not be used or stored near exits. [CFC §8212.4]
6. Smoking and open flame devices (e.g. candles, flaming food or beverage preparation) shall be prohibited within 5 feet of any LPG container. "NO SMOKING" signs shall be posted at affected locations. This may preclude smoking at certain tables and/or areas. [CFC Table 8204-A]
7. LPG Containers shall be located in ventilated enclosures to prevent unauthorized access. [UFC Standard 82-1 §5-4.2.1]

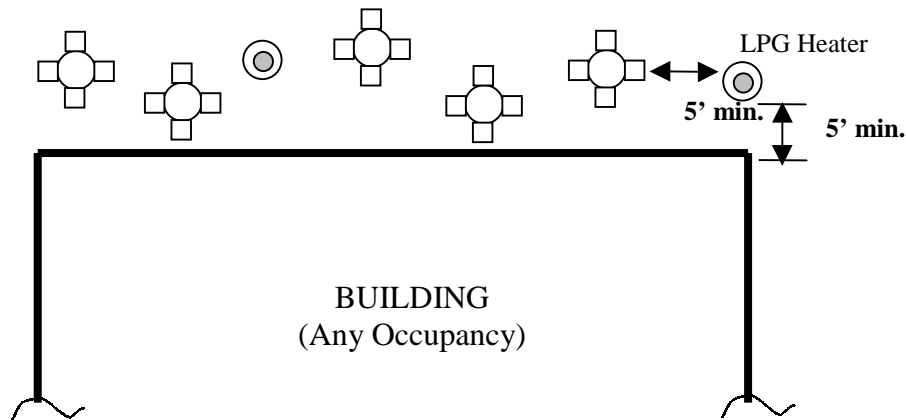
8. LPG containers shall be protected from vehicular impact. [CFC §8210]
9. Heaters shall be equipped with an automatic device that will shut off the flow of gas to the main burner and, if applicable, the pilot in the event of flame extinguishment. [UFC Standard 82-1 §2-6.3.5(a)]
10. A minimum 2A:40BC fire extinguisher shall be mounted with the top located no higher than 5 feet above floor level. Travel distance to the extinguisher shall not exceed 50 feet. [UFC Standard 10-1]
11. LPG shall not be stored inside any building. [CFC §1103.3.2.6 & 8212.9]
12. LPG containers shall be in an upright position such that the pressure relief valve is in direct contact with the vapor phase of the container. [CFC §8004.1.13]
13. Refilling of LPG containers shall not be conducted on-site. Changing of cylinders shall not be done while the public is present. [CFC §8206]
14. LPG containers shall be secured from falling over whether full, partially full, or empty. A tilt or tip-over switch is also required whereby the gas supply automatically shuts down when the container is tilted more than 19 degrees from vertical. [CFC §7401.6.4]

#### **D. General Safety Precautions**

1. In the event of an LPG leak or suspected leak, the container shall be immediately removed from the premises. Periodic leak tests with soapy water shall be conducted by trained personnel to ensure the container and fittings are tight.
2. Adequate precautions shall be made to prevent heaters and LPG from falling over.
3. Confined/enclosed dining areas must be provided with exits.

## E. Examples

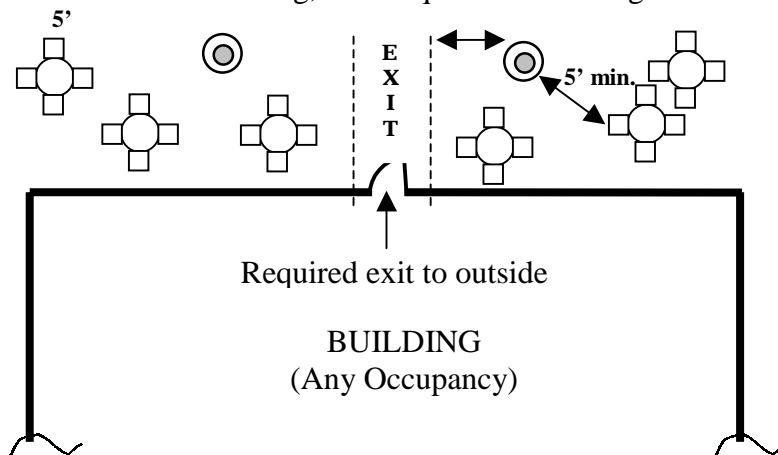
**Example 1:** Unconfined/unenclosed outdoor seating with no required exit through seating area.



Listed Propane (LPG) Heaters Approved with the following conditions:

- LPG Heater minimum 5 feet away from building and combustibles.
- Smoking not permitted within 5 feet of LPG container.

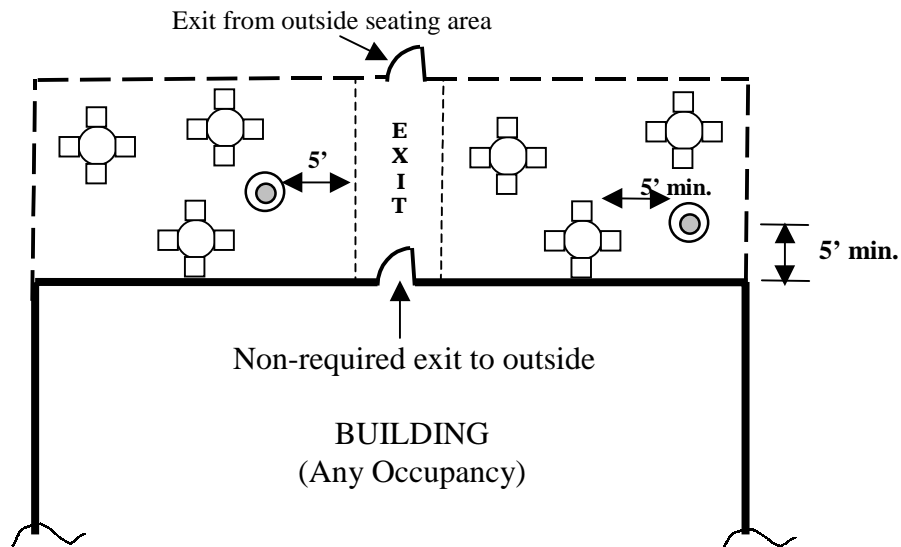
**Example 2:** Unconfined outdoor seating, with required exit through outdoor seating.



Listed Propane (LPG) Heaters Approved with the following conditions:

- LPG Heater minimum 5 feet away from building, exit doors, and exit pathways.
- Smoking not permitted within 5 feet of LPG container.

**Example 3:** Confined/enclosed outdoor seating with less than 50 occupant load.



Listed Propane (LPG) Heaters Approved with the following conditions:

- Required exits from building shall not pass through enclosed outdoor seating area.
- LPG Heater minimum 5 feet away from building and away from exit doors and exit pathways.
- Smoking not permitted within 5 feet of LPG container.